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| 09/914,681      | 08/31/2001  | Akihiko Kougami      | 62758-012           | 9651             |

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EXAMINER

TRAN, TRANG U

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2614

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/914,681

Applicant(s)

KOUGAMI ET AL.

Examiner

Trang U. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 3-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 08/31/01; 11/08/01
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election of Group I (claims 1 and 2) in the reply filed on August 05, 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 3-27 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected claims, there being no allowable generic or linking claim. Election was made in the reply filed on August 05, 2004.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipate by Awamoto et al. (US Patent No. 5,898,414).

In considering claim 1, Awamoto et al discloses all the claimed subject matter, note 1) the claimed scanning pulses of same phase are applied to plurality of first display lines in a first field, building up a one frame therewith, and scanning pulses of same phase are applied to plurality of second display lines in a second field thereof,

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thereby conducting the address operation is met by the display of Fig. 11, within the subframe, control is given so that two lines are selected simultaneously during an addressing scan period and the same data is displayed on each line, during an odd field, picture data for the first, third, fifth lines, etc. is displayed on the first and second lines, third and fourth lines, fifth and sixth lines, etc, during an even field, picture data for the second, fourth, sixth lines, etc. is displayed on the second and third lines, fourth and fifth lines, sixth and seventh lines, etc. (Fig. 11, col. 10, line 48 to col. 11, line 27).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Awamoto et al. (US Patent No. 5,898,414) in view of Matsumoto et al. (US Patent No. 5,365,284).

In considering claim 1, Awamoto et al discloses all the claimed subject matter, note 1) the claimed X and Y electrodes, being disposed in parallel to each other in a pair, for forming one display line therewith, and an address electrode being disposed to separate from and to cross over said both electrodes, in plural numbers thereof is met by the AC type plasma display panel 1 (Fig. 1, col. 3, line 28 to col. 2, line 10), and 2) the claimed scanning pulses of same phase are applied to the first display lines in a first field, building up a one frame therewith, and scanning pulses of same phase are applied

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to Y electrode of second display lines in a second field thereof, thereby conducting the address operation, so as to perform video display thereon is met by is met by the display of Fig. 11, within the subframe, control is given so that two lines are selected simultaneously during an addressing scan period and the same data is displayed on each line, during an odd field, picture data for the first, third, fifth lines, etc. is displayed on the first and second lines, third and fourth lines, fifth and sixth lines, etc, during an even field, picture data for the second, fourth, sixth lines, etc. is displayed on the second and third lines, fourth and fifth lines, sixth and seventh lines, etc. (Fig. 11, col. 10, line 48 to col. 11, line 27).

However, Awamoto et al explicitly do not disclose the claimed scanning pulses are applied to the X electrodes of the first display lines in the first field.

Matsumoto et al teach that the scan driver 50 is connected to  $Nf/2$  scan signal lines 80 which are the odd numbered ones counted from the upper portion of the liquid crystal panel 1 to drive the same, the scan driver 60 is connected to  $Nf/2$  scan signal lines 80 which are even numbered ones to drive the same, in the following, the scan drivers 50 and 60 are referred to as odd driver and even driver (Figs. 6 and 7, col. 15, line 59 to col. 16, line 60).

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the odd and even scan drivers as taught by Matsumoto et al into Awamoto et al's system in order to provide the display device capable of providing image display with superior vertical resolution and less flickers.

### ***Conclusion***

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6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ide et al. (US Patent No. 6,496,165 B1) disclose driving apparatus for driving a plasma display panel based on power consumed during a non-light emitting period of a unit display period.

Huang (US Patent No. 6,433,762 B1) discloses method and apparatus for driving a plasma display panel.

Wani et al. (US Patent No. 6,236,380 B1) disclose method for displaying gradation with plasma display panel.

Hirakawa et al (US Patent No. 6,020,687) disclose method for driving a plasma display panel.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trang U. Tran whose telephone number is (703) 305-0090. The examiner can normally be reached on 8:00 AM - 5:30 PM, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TT TT  
December 2, 2004

  
JOHN MILLER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600